

IN THE CLAIMS:

Please cancel claims 7 and 9-22, amend claim 1, and add new claims 23-29, as follows:

1. (Currently Amended) A method of smoothing cursor movement, the method comprising:

receiving, from a pointing device, an indication of an amount of movement of an operation instrumentality of the pointing device in a first direction;

reporting to a data input device having a display, at a reporting time, a predetermined portion of the amount of the movement in the first direction; and

reporting, in at least one subsequent reporting step, a remainder of the amount of the movement in the first direction,

wherein an amount of time between report times is no larger than an amount of time between refreshes of the display.

2. (Original) The method of claim 1, wherein at least two reporting steps are performed for each one time the receiving step is performed.

3. (Original) The method of claim 1, wherein:
the step of receiving further comprises receiving, from the pointing device, an indication of an amount of movement of the pointing device in a second direction,

the step of reporting to the data input device having the display further comprises reporting to the data input device, at the reporting time, a predetermined portion of the amount of the movement in the second direction, and

the step of reporting in at least one subsequent reporting time further comprises reporting, in said at least one subsequent reporting step, a remainder of the amount of the movement in the second direction.

4. (Original) The method of claim 1, wherein at least three said reporting steps are performed to report the amount of movement.

5. (Original) The method of claim 1, wherein a first value, received from the pointing device, represents the indication of an amount of movement in the first direction, the method further comprising:

deriving a first reporting value from the first value, the first reporting value being less than an original value of the first value received from the pointing device;

subtracting the first reporting value from the first value to update the first value to indicate a remaining amount of movement in the first direction not yet reported,

wherein a first one of the reporting steps reports the first reporting value and the remaining amount of movement is reported in said at least one subsequent reporting step.

6. (Original) The method of claim 5, wherein a second value, received from the pointing device, represents the indication of an amount of movement in the second direction, the method further comprising:

deriving a second reporting value from the second value, the second reporting value being less than an original value of the second value received from the pointing device;

subtracting the second reporting value from the second value to update the second value to indicate a remaining amount of movement in the second direction not yet reported,

wherein the first one of the reporting steps reports the second reporting value and the remaining amount of movement is reported in said at least one subsequent reporting step.

7. (Canceled).

8. (Original) The method of claim 1, wherein the predetermined portion of the amount of movement reported to the data input device is limited to a predefined maximum value and the remaining amount of movement that is subsequently reported includes an amount of movement in excess of the predefined maximum value.

Claims 9-22. (Canceled).

23. (New) An apparatus for smoothing cursor movement, comprising:

an input configured to receive first data representing a series of original movement amounts of a pointing device;

a processor configured to partition the original movement amounts into smaller movement amounts; and

an output configured to output second data representing a series of the smaller movement amounts, the number of smaller movement amounts output per original movement amount being variable.

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24. (New) The apparatus of claim 23, wherein the series of original movement amounts are received at a rate lower than a rate that the smaller movement amounts are output.

25. (New) A method for smoothing cursor movement, comprising steps of:

receiving first data representing a series of original movement amounts of a pointing device;

partitioning the original movement amounts into smaller movement amounts; and

outputting second data representing a series of the smaller movement amounts, the number of smaller movement amounts output per original movement amount being variable.

26. (New) The method of claim 30, wherein the step of outputting includes outputting the second data at a higher rate than the first data is received.

27. (New) An apparatus for smoothing cursor movement, comprising:
an input configured to receive first data representing a series of original movement amounts of a pointing device;
a processor configured to partition the original movement amounts into smaller movement amounts; and
an output configured to output second data representing a series of the smaller movement amounts to a computer having a display, the second data being output at a reporting rate that is asynchronous with a refresh rate of the display.

28. (New) An apparatus for smoothing cursor movement, comprising:
an input configured to receive first data representing a series of original movement amounts of a pointing device;
a processor configured to partition the original movement amounts into smaller movement amounts; and
a universal serial bus (USB) output configured to output second data representing a series of the smaller movement amounts.

29. (New) An apparatus for smoothing cursor movement, comprising:

an input configured to receive first data representing a series of original movement amounts of a pointing device at a first regular interval;

a processor configured to partition the original movement amounts into smaller movement amounts; and

an output configured to output second data representing a series of the smaller movement amounts at a second regular interval to a computer having a display, the display being refreshed at a third regular interval,

the second regular interval being shorter than the first and third regular intervals, the first regular interval being longer than the third regular interval.

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